

ABSTRACT OF THE DISCLOSURE

A surface acoustic wave filter includes a plurality of one-terminal-pair surface acoustic wave resonators each including interdigital electrodes and an insulating film deposited on the interdigital electrodes. The one-terminal-pair surface acoustic wave resonators include a series arm resonator and a parallel arm resonator. When the electrode duty of a one-terminal pair surface acoustic resonator is defined by the following equation (1):

$$\text{electrode duty} = 2 \times W/\lambda \quad \dots(1)$$

where λ denotes the wavelength of the one-terminal-pair surface acoustic wave resonator, and W denotes the line width of an interdigital electrode, the electrode duty of the series arm resonator is greater than the electrode duty of the parallel arm resonator. With this structure, a single deposition of the insulating film is sufficient to achieve the desired frequency adjustment without the frequency bandwidth being narrowed.